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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,756	05/20/2004	Anthony C. Ross	80100.034US2	7358
30328	7590	01/12/2005	EXAMINER	
NU VASIVE, INC. 10065 OLD GROVE ROAD SAN DIEGO, CA 92131			RAJGURU, UMAKANT K	
			ART UNIT	PAPER NUMBER
			1711	
DATE MAILED: 01/12/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/849,756

Applicant(s)

ROSS ET AL.

Examiner

Umakant K. Rajguru

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-15, drawn to a composition, classified in class 524, subclass 440.

II. Claims 16-20, drawn to a method, classified in class 430, subclass 207.

The inventions are distinct, each from the other because:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process as claimed can be practiced with another materially different product such as a hydrogel.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

2. During a telephone conversation with Attorney Jonathan Spangler on December 08, 2004 a provisional election was made without traverse to prosecute the invention of II, claims 16-20. Applicant in replying to this Office action must make affirmation of this election. Claims 1-15 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

3. Claims 16-20 are presented for examination.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 16, 19 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannschedel (US 6126446) in view of Shoher et al (US 5272184).

Mannschedel discloses composition for filling tooth root canals comprising an isoprene-based powder and a sealer (abstract). The powder is transpolyisoprene,

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gutta-percha, balata or mixture thereof (col. 2, lines 3-9). The sealer is used at 50% by wt. of composition (col. 3, line 10-16). Some additives such as fillers, x-ray contact agents, dyes, and titanium dioxide may be included (col. 3, lines 11-16). In the method of preparation (col. 3, lines 40-46), the additives are incorporated during or after comminution of isoprene-based material. This means that the additive/s is/are dispersed into the polymer matrix. The composition can be applied with a syringe (col. 3, line 56).

Mannschedel does not mention particles of titanium, or gold and also titanium whiskers.

Shoher discloses a metal composite for filling a dental cavity. The composite comprises particles of high-fusing-temp metal, particles of low-fusing-temp metal and a binder substantially of wax (col. 2, lines 61-68). Gold particles are preferably added (col. 4, lines 8-109; 19-21). Average particle size of metals is 2-20 microns (col. 4, lines 26-27). Metals from fourth group of elements of the periodic table are also suitable (col. 4, lines 7-8). Titanium metal is one element in that group.

Therefore it would have been obvious to use in the composition of Mannschedel, titanium or gold particles (taught by Shoher) because these are called noble metals due to their non-reactive character thereby providing a composition, which is safe for using in human body for considerably longer periods than other metals or non-metals.

6. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mannschedel (US 6126446) in view of Shoher et al (US 5272184) as applied to claim 16 above, and further in view of Kosegaki et al (US 4569736).

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Combination of Mannschedel and Shoher does not mention sterilization of composition.

Kosegaki discloses polyolefin composition (for medical instruments), which has been sterilized with gamma irradiation.

It would have therefore been obvious to sterilize the composition of Mannschedel in order to render it free from bacteria so that it can be used for root canals without any problem/s later due to infection/s.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umakant K Rajguru whose telephone number is 571-272-1077. The examiner can normally be reached on Monday thru Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-9306. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Rajguru/LR  
January 4, 2005



James J. Seidleck  
Supervisory Patent Examiner  
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